

Title (en)

Methods and apparatus for reducing spectral artifacts in a computed tomograph system

Title (de)

Verfahren und Vorrichtung zur Verringerung von spektralen Artefakten im Computer-Tomographiesystem

Title (fr)

Procédé et appareil pour la réduction l'artefact spectral dans un systeme tomographique à ordinateur

Publication

**EP 0973048 A3 20020731 (EN)**

Application

**EP 99305495 A 19990712**

Priority

US 11839798 A 19980717

Abstract (en)

[origin: EP0973048A2] Methods and apparatus for reducing spectral artifacts in a computed tomography (CT) system (10) are described. In one embodiment, the CT system (10) includes a plurality of multislice detector modules (20), a detector housing (50) and a collimator (62) adjacent the detector modules (20). Each detector module (20) is mounted to the detector housing (50) and includes a scintillator array (56). The collimator (62) includes a plurality of plates (64) that are positioned so that a x-ray beam shadow is centered over gaps in the scintillator array (56). In operation, the collimator (62) separates the x-ray beams (16) so that the scintillator gaps are protected and the x-ray beams (16) are prevented from projecting through the scintillator array elements along a shortened length path. <IMAGE> <IMAGE>

IPC 1-7

**G01T 1/29**; **G01T 1/00**; **G01T 1/164**

IPC 8 full level

**A61B 6/03** (2006.01); **A61B 6/00** (2006.01); **A61B 6/06** (2006.01); **G01T 1/00** (2006.01); **G01T 1/164** (2006.01); **G01T 1/29** (2006.01)

IPC 8 main group level

**G01T** (2006.01)

CPC (source: EP US)

**A61B 6/032** (2013.01 - EP US); **A61B 6/06** (2013.01 - EP US); **A61B 6/4085** (2013.01 - EP US); **A61B 6/4411** (2013.01 - EP US); **G01T 1/2985** (2013.01 - EP US); **A61B 6/4021** (2013.01 - EP US)

Citation (search report)

- [X] US 5373162 A 19941213 - AKAI YOSHIMI [JP]
- [X] US 4731534 A 19880315 - KLEIN SIGISMUND [DE], et al
- [X] US 4180737 A 19791225 - KINGSLEY JACK D [US]

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0973048 A2 20000119**; **EP 0973048 A3 20020731**; **EP 0973048 B1 20070613**; DE 69936278 D1 20070726; DE 69936278 T2 20080214; IL 130935 A0 20010128; IL 130935 A 20040831; JP 2000037377 A 20000208; JP 4502422 B2 20100714; US 6266434 B1 20010724

DOCDB simple family (application)

**EP 99305495 A 19990712**; DE 69936278 T 19990712; IL 13093599 A 19990714; JP 20109599 A 19990715; US 11839798 A 19980717